

## **Public Service Commission of Wisconsin**

Eric Callisto, Chairperson Mark Meyer, Commissioner Lauren Azar, Commissioner 610 North Whitney Way P.O. Box 7854 Madison, WI 53707-7854

January 29, 2009

## VIA ELECTRONIC MAIL

Mr. Scot R. Smith Wisconsin Power and Light Company P.O. Box 77007 Madison, WI 53707-1007

Re: Application of Wisconsin Power and Light Company and Wisconsin Electric Power Company for a Certificate of Authority to Install a Selective Catalytic Reduction System for NOx Removal on Unit 5 at the Edgewater Generating Station, Sheboygan County, Wisconsin

tnority

05-CE-137

## Dear Mr. Smith:

Public Service Commission (Commission) staff has the following data request regarding Wisconsin Power and Light Company's (WP&L) December 15, 2008, application in the docket listed above:

- 1.01 p. 3 par. 1: Refers to Edge 5 with a gross capacity of 380 MW. Should this read 380 MW net, not gross?
- 1.02 p. 5 par. 2: How does the installation of an SCR affect Unit 5 operation? For example, will the minimum operating load be higher or lower with or without a SCR? What is the anticipated ramp rate from minimum to maximum load?
- 1.03 p. 5 par. 2: What is the anticipated cost of a SCR bypass and has it been considered? Without a reactor bypass how is unit operation affected? For example, will the minimum operating load be higher or lower with or without a bypass? Could a SCR bypass be requested as part of the air permit?
- 1.04 p. 7 par. 3: Does the design of the SCR have room for a 4<sup>th</sup> layer if later required?
- 1.05 p. 7 par. 3: With an economizer bypass how is unit startup affected? Will the minimum operating load change with or without this bypass?
- 1.06 p. 7 par. 4: When will the updated proposals from constructors be available?
- 1.07 p. 10 par. 1: Provide a copy of the independent cost estimate referred to for this project.
- 1.08 p. 16 par. 3: In docket 05-CE-118 April 2008 status report it was mentioned an increase in CO emissions was being requested for Unit 5? What is the status of CO emissions changes now with the SCR application?
- 1.09 p. 16 par. 3: In docket 05-CE-118 April 2008 status report it was mentioned on p. 5 of 6 that average emission levels were .146 which is slightly higher than the .16 lb/MMBTU stated in the application. Please discuss.
- 1.10 p. 17 footnote 4: Provide an update to the statement about which counties are non-attainment for PM2.5

Telephone: (608) 266-5481 Fax: (608) 266-3957 Home TTY/TextNet: In Wisconsin (800) 251-8345, Elsewhere (608) 267-1479 E-mail:

Home Page: http://psc.wi.gov E-mail: pscrecs@psc.state.wi.us Mr. Scott R. Smith

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- 1.11 p. 19 par. 4: Provide an update to what levels of control (before and after) are being experienced for Hg with activated carbon injection.
- 1.12 p. 25 Table 4: Provide electronic copy of the table.
- 1.13 p. 25 Table 4: Beginning in 2013, should the level of NOx be .15 instead of .20 for Edgewater 3 under all 3 scenarios?
- 1.14 p. 35 par. 5: Provide update to the anticipated emission levels for Sulfuric Acid Mist (SAM). What levels are being requested in the air permit?
- p. 43 Table as Appendix C; Catalyst disposal: Provide estimated cost for catalyst disposal and explain how this is incorporated into the EGEAS analysis.
- 1.16 p. 52 Table 10: Provide updated electronic copies of all EGEAS runs.
- 1.17 p. 52 Table 10: Please provide the actual annual energy sold in megawatt hours (MWh), by customer class, for 2000 through 2008. Provide breakdown of 2008 energy sales by class and month
- 1.18 p. 52 Table 10: Document how energy sales for 2008 were compiled and how the results correlate to FERC Form 1 (Historically, results have equaled native load as provided in FERC Form 1). Provide analysis of how this was incorporated into EGEAS.
- 1.19 Provide a copy of the latest WP&L system wide emissions control plan.
- 1.20 Provide any changes since the Board of Directors approved the WP&L fleet-wide emission control plan for NO<sub>x</sub>, SO<sub>2</sub>, and Hg.
- 1.21 Describe how the fleet-wide plan addresses SO<sub>2</sub> emissions from the Edgewater plant.
- 1.22 Describe how the fleet-wide plan addresses SO<sub>2</sub> emissions for the WP&L fleet.
- 1.23 Describe how the fleet-wide plan addresses  $PM_{10}$  and/or  $PM_{2.5}$  emissions.
- 1.24 Provide the current and expected market price and escalation for NO<sub>x</sub>, SO<sub>x</sub>, and Hg (if available) allowances. Provide the source and date of this information.
- 1.25 Provide a schedule for pollution control installations for other WP&L-owned or operated plants.
- 1.26 Provide a schedule for the filing of construction applications for the other WP&L-owned or operated plants.

Please post your response to the Commission's Electronic Regulatory Filing (ERF) system. If you have any questions regarding this request, please contact me at (608) 267-9509.

Sincerely,

## /s/ Ken Detmer

Ken Detmer, P.E. Docket Coordinator Gas and Energy Division

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